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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/553,804	12/01/2005	Tom Jacobsen	05139	6086
23338 7590 08/23/2007 DENNISON, SCHULTZ & MACDONALD 1727 KING STREET SUITE 105 ALEXANDRIA, VA 22314			EXAMINER BEACH, THOMAS A	
			ART UNIT 3671	PAPER NUMBER
			MAIL DATE 08/23/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/553,804	JACOBSEN ET AL.	
	Examiner	Art Unit	
	Thomas A. Beach	3671	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 October 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the two or more symmetrically arranged nozzles must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-4, 7-9, and 11-13 are rejected under 35 U.S.C. 102(e) as being anticipated by Jacobsen et al 6,966,132. Jacobsen shows apparatus for removal of cuttings from a borehole (col 1 lines 13-15) with the use of an ejector, characterized in that the device comprises a first unit in the form of an ROV (1) with a rigidly attached ejector pump (12) provided with a connecting hose (5) terminated with a first part (6) of a coupling and at least a second unit comprising a suction hose (8) and an ejector (7), said ejector (7) being provided with a second part of said coupling, said first part and said second part of said coupling being adapted to be connected to one another (fig 1).

As concerns claim 2, Jacobsen shows the suction hose's inlet end is arranged to be connected to a guide base at a borehole opening with an adapted coupling (col 1 lines 13+).

As concerns claim 3, Jacobsen shows the ejector pump (12) supplying the ejector (7) with water, is powered by the power supply (3) for the ROV (1).

As concerns claim 4, Jacobsen shows the ejector (7) is arranged at the outlet end of the suction hose (5).

As concerns claim 7, Jacobsen shows the ejector (5) is of a type having an ejector nozzle arranged completely external of the boring of the ejector tube.

As concerns claim 8, Jacobsen shows the inlet end of the suction hose (6) a pipe or suction head with two inlet openings are arranged at a vertical distance from one another, the upper one thus arranged to suck in only water while the lower one is arranged to suck in a combination of sediment and water.

As concerns claim 9, Jacobsen shows the suction hose (6) and the ejector (7) has a common, substantially constant cross section.

As concerns claim 11, Jacobsen shows the outlet end (i0) of the ejector (7) is shaped with a gradually increasing cross section.

As concerns claim 12, Jacobsen shows the coupling between the water pump (12) and the ejector (7) is chosen among existing rapid couplings.

As concerns claim 13, Jacobsen shows the at least one nozzle, arranged for being supplied with water by the pump (12), is arranged near the inlet end of the suction hose (5) to allow back-flush of water through the suction hose (15) to flush out any sediment that incidentally get stuck at said inlet end.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 5-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jacobsen et al 6,966,132 in view of Edvardsen 6,877,565.

As concerns claims 5-6, Jacobsen does not show a discharge hose or pipe connected to the outlet side of the ejector so that the sediment can be transported further away from the borehole or connected directly to a guide base around a borehole with a suitable coupling while the outlet side of the ejector is connected to a discharge hose, said remote operating unit 14 preferably being connected to the ejector by means of a particular extension hose. However, Edvardsen shows a similar apparatus for removal of cuttings from a borehole (16) with the use of an ejector a discharge hose 22 or pipe 22 connected to the outlet side of the ejector so that the sediment can be transported further away from the borehole or connected directly to a guide base around a borehole with a suitable coupling while the outlet side of the ejector is connected to a discharge hose, said remote operating unit 14 preferably being connected to the ejector by means of a particular extension hose (fig 1). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Jacobsen, as taught by Edvardsen, to include the coupling to the borehole arrangement and hose to improve the versatility of the apparatus for various uses.

6. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jacobsen et al 6,966,132 alone. As concerns claim 10, Jacobsen shows the ejector (7) is a straight shaped ejector but it would be obvious to have two or more symmetrically

arranged nozzles to increase the amount of sediment removed and relocate it in more than one place at one time, thus improving efficiency.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas A. Beach whose telephone number is 571.272.6988. The examiner can normally be reached on Monday-Friday, 8:00am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Will can be reached on 571.272.6998. The fax phone number for the organization where this application or proceeding is assigned is 571.273.8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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Thomas A. Beach

August 16, 2007

THOMAS A. BEACH
Primary Examiner
Group 3600